

shown in Figure 17 and Figure 18.

Figure 20 is a lateral perspective view of an introducer of a distraction system according to one embodiment of the present invention;

Figure 21 is a lateral perspective view (left) and a top perspective view (right) of one embodiment of a spacing component of the distraction system including the introducer shown in Figure 20;

Figure 22 is a lateral perspective view (left) and a top perspective view (right) of one embodiment of another spacing component of the distraction system including the introducer shown in Figure 20;

Figure 23 is a lateral perspective view of another distraction system according to the present invention in the undeformed configuration;

Figure 24 is a lateral perspective view of the distraction system shown in Figure 23 in the deformed configuration;

Figure 25 is a lateral perspective view of the barbed plug of another distraction system according to the present invention in the deformed configuration (left) and in the undeformed configuration (right);

Figure 26 is a top perspective view (left) and a lateral perspective view (right) of the ratchet device of the distraction system including the barbed plug shown in Figure 25 in the deformed configuration;

Figure 27 is a top perspective view (left) and a lateral perspective view (right) of the ratchet device of the distraction system including the barbed plug shown in Figure 25 in the undeformed configuration;

Figure 28 through Figure 45 are partial, cutaway, lateral perspective views illustrating some aspects of the method of the present invention for treating diseases and conditions that change the spacial relationship between two vertebral bodies and the intervertebral disk, or that cause instability of the vertebral column, or both, according to the present invention; and

Figure 46 through Figure 55 are partial, cutaway, lateral perspective views illustrating some aspects of one embodiment of the method of the present invention as performed on a first vertebral body of a first vertebra, a second vertebral body of a second vertebra, an intervertebral disk between the first vertebral body and second vertebral body, a third vertebral body of a third vertebra and an intervertebral disk between the second

as will be understood by those with skill in the art with reference to this disclosure.

Referring now to Figure 46 through Figure 55, there are shown partial, cutaway, lateral perspective views illustrating some aspects of this embodiment of the method as performed on a first vertebral body 1000 of a first vertebra 1002, a second vertebral body 1004 of a second vertebra 1006, an intervertebral disk 1008 between the first vertebral body 1000 and second vertebral body 1004, a third vertebral body 1010 of a third vertebra 1012 and an intervertebral disk 1014 between the second vertebral body 1004 and third vertebral body 1010. As can be seen, after selecting a suitable patient, transpedicular access to the first vertebral body 1000 is obtained percutaneously and a non-flexible bone drill is used to access the intervertebral disk 1008 between the first vertebral body 1000 and the second vertebral body 1004 substantially as disclosed above. However, in this embodiment, a flexible drill 1016 is used to continue making a channel completely through the intervertebral disk 1008 between the first vertebra 1002 and second vertebral body 1004, Figure 46, through the second vertebral body 1004 and into the intervertebral disk 1008 between the second vertebral body 1004 and the third vertebral body 1010, Figure 47. Next, the intervertebral disk 1008 between the second vertebral body 1004 and the third vertebral body 1010, as well as a portion of the inferior endplate 1018 of the second vertebral body 1004 and the superior endplate 1020 of the third vertebral body 1010, are removed using a cutting device (not shown) or an enucleation device 1022 or both, or an equivalent device, Figure 48 and Figure 49. Then, a fusion agent containing device 1024 is deployed into the intervertebral 1014 between the second vertebral body 1004 and the third vertebral body 1010 and in the intervertebral disk 1008 between the first vertebral body 1000 and the second vertebral body 1004, Figure 50. In a preferred embodiment, a distraction system 1026 is placed within the fusion agent containing device 1024 in both the intervertebral disk 1008 between the first vertebra 1002 and second vertebral body 1004, and the intervertebral disk 1008 between the second vertebral body 1004 and the third vertebral body 1010, Figure 51, Figure 52, Figure 53 and Figure 54. Next, each fusion agent containing device 1024 is filled with fusion agent, thereby fusing the first vertebra 1002 to the second vertebra 1006, and fusing the second vertebra 1006 to the third vertebra. Additionally, in a preferred embodiment, Figure 55, an additional fusion procedure can be performed to join the first vertebra 1002 with the second vertebra 1006, to join the second vertebra 1006 with the third vertebra, or both, in a manner corresponding to Figure 45.